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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,660	09/19/2003	Kendra Gallup	10030808-1	8585

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
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EXAMINER

NGUYEN, THINH T

ART UNIT	PAPER NUMBER
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2818

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No.

10/665,660

Applicant(s)

GALLUP ET AL.

Examiner

Thinh T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED OFFICE ACTION

1. Applicants' election of claims 1-25 for prosecution without traverse in the communication with the Office on 8/23/04 is acknowledged.

Specification

2. The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant cooperation is requested in correcting any errors of which the applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b/e) that form the basis for the rejections under this section made in this office action.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claim 1-3, 8,9,11-13, 16,17, are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer (U.S. Patent 4,307,934) or Spaeth et al. (US patent 5,981,945).

REGARDING CLAIM 1

Palmer discloses (the abstract, fig 2) a device comprising: a sub-mount; (fig 2 reference 28) a die including a sensor(fig 2 reference 38) that is electrically connected to the sub-mount; a cap (fig 2 reference 33) attached to the sub-mount so as to form a cavity enclosing the die; and an alignment post(fig 2 reference 54) attached to the cap along an optical path to the sensor.

Similarly Spaeth et al. disclose (the abstract, fig 5) a device comprising: a sub-mount (fig 5 reference 14); a die (fig 5 reference 11) including a sensor that is electrically connected to the sub-mount; a cap(fig 5 reference 15) attached to the sub-mount so as to form a cavity enclosing the die; and an alignment post(fig 5 reference 20) attached to the cap along an optical path to the sensor.

REGARDING CLAIM 2

Palmer discloses (the abstract, fig 2) a device comprising a sleeve having a bore sized to accommodate the alignment post at a first end of the bore and an optical fiber (fig 2 reference 47) connector at a second end of the bore.

Similarly Spaeth et al. disclose (the abstract, fig 5) the same invention.

REGARDING CLAIM 3

Palmer discloses (the abstract, fig 2) a device wherein the die is attached to the sub-mount so that a front face of the die is adjacent the sub-mount.

Similarly Spaeth et al. disclose (the abstract, fig 5) the same invention.

REGARDING CLAIM 8,16

Palmer (the abstract, fig 2, column 5 line 3, claim 15) discloses a device wherein the cavity enclosing the die is hermetically sealed.

Similarly Spaeth et al. disclose (the abstract, fig 5, column 2 line 40) the same invention.

REGARDING CLAIM 9,17

Palmer (the abstract, fig 2) discloses a device wherein the sub-mount comprises: internal terminals that are within the cavity and electrically connected to the die; and external terminals (fig 2, reference 27) that are accessible outside the cavity and are electrically connected to the internal terminals.

Similarly Spaeth et al. disclose (the abstract, fig 5, terminal 21 and 22) the same invention.

REGARDING CLAIM 11

Palmer (the abstract, fig 2) discloses a device comprising: a sub-mount; a die including a sensor (fig 2 reference 38) having a photosensitive faces at a front face of the die, the die being attached to the sub-mount so that the front face of the die is adjacent the sub-mount; a cap attached to the sub-mount (fig 2 reference 33) so as to form a cavity enclosing the die, the cap permitting transmission of an optical signal into the cavity; and a lens (fig 2 reference 42) on a back face of the die, the lens focusing the optical signal onto the photosensitive area of the sensor.

Similarly Spaeth et al. disclose (the abstract, fig 5) discloses the same invention.

REGARDING CLAIM 12,13

Palmer discloses (the abstract, fig 2) a device comprising a post attached to the cap along

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an optical path to the photosensitive area of the sensor and further comprising a sleeve having a bore sized to accommodate the alignment post at a first end of the bore and an optical fiber connector at a second end of the bore.

Similarly Spaeth et al. disclose (the abstract, fig 5) discloses the same inventions.

5. Claims 4, 6-7, 14-15, 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer (U.S. Patent 4,307,934)

REGARDING CLAIM 4

Palmer (the abstract, fig 2) discloses a device comprising a lens (fig 2 reference 42) formed on a back face of the die, the lens focusing a photosensitive area of the sensor (fig 2 reference 38).

REGARDING CLAIM 6, 14

Palmer (the abstract, fig 2) discloses a device wherein the sub-mount (fig 2 , reference 28) incorporates an active circuit (fig 2 reference 25) that operates on an electrical output signal of the sensor.

REGARDING CLAIM 7, 15

Palmer (the abstract, fig 2) discloses a device wherein the active circuit comprises an amplifier (column 2 line 60).

REGARDING CLAIM 19

Palmer (the abstract, fig 2) discloses a device comprising: a semiconductor sub-mount including an active circuit (fig 2 reference 25) integrated into the semiconductor sub-mount; a

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die including a photosensor that is electrically connected to the active circuit; and a cap (fig 2 reference 33) attached to the sub-mount so as to form a cavity enclosing the die.

REGARDING CLAIM 20,21,22

Palmer (the abstract, fig 2) discloses a device wherein the active circuit operates on an electrical output signal of the photosensor, wherein the active circuit comprises an amplifier (column 2 line 60) and wherein the cavity enclosing the die is hermetically (column 5 line 3) sealed.

REGARDING CLAIM 23,24

Palmer (the abstract, fig 2) discloses a device wherein an optical signal enters the cavity through the cap, and wherein the sub-mount comprises: internal terminals (fig 2 reference 27) that are within the cavity and electrically connected to the die; and external terminals that are accessible outside the cavity and electrically connected to the internal terminals.

Claim Rejections - 35 USC § 103

6. The following is a quotation of U.S.C. 103(a) which form the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spaeth et al. (U.S. patent 5,981,945) in view of further remark,

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REGARDING CLAIM 5

Spaeth et al. (the abstract, fig. 5) disclose all the invention except for the inclusion of lens integrated into the enclosure cap of the photosensor. This feature, however is considered obvious since Spaeth et al. disclose an optical window (fig 5 reference 16) that can be a lens.

A person of ordinary skill in the art at the time the invention was made would be able to modify window 16 to make a lens to improve the performance of the device invented by Spaeth et al. if more intensity optical energy is needed as shown in US patent 5,390,271 by Priest (column 2 lines 52-53) .

8. Claims 10,18,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer (US patent 4,307,934) in view of further remark.

REGARDING CLAIM 10,18,25

Palmer (the abstract, fig 2) discloses all the inventions of claim 10,18,25 except for the inclusion of a flexible circuit connected to the external terminals.

This feature, however, is considered obvious since it is a common technique for interconnecting and interfacing optoelectronics devices.

It would have been obvious to one of ordinary skill in the art the time the invention was made to use his regular design skill to attach a flexible circuit in order to adapt to the intended use of the device and improve its marketability.

9. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and the page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

10. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to be abandoned (see M.P.E.P. 710.02(b)).

CONCLUSION

11. The prior arts made of record and not relied upon are considered pertinent to applicant disclosure: Eldring et al. (US patent 6,757,308) disclose an hermetically sealed transmitter optical subassembly.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790.

The examiner can normally be reached on Monday-Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached at 571-272-1787.


The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Thinh T. Nguyen 

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David Nelms
Supervisory Patent Examiner
Technology Center 2800